

LISTING OF CLAIMS

The listing of claims provided below replaces all prior versions, and listings, of claims in the application.

5 1-8. (Cancelled)

9. (Currently Amended) A computer implemented system for providing a graphical user interface for a component based application program, comprising:

a plurality of user interface components;

10 a document viewer for displaying a document or modifying the document within a component based application program, the document viewer having a user interface requirements specification referencing at least one of said plurality of user interface components; and

15 a renderer to render a graphical user interface for the component based application program according to said document viewer user interface requirements specification, when said document viewer is added as a component of the component based application program, without a need to recompile or reinstall the component based application program.

20 10. (Currently Amended) The computer implemented system of claim 9 further comprising a workflow manager for registering user interface components associated with said user interface requirements specification.

25 11. (Currently Amended) The computer implemented system of claim 9 wherein at least one of said plurality of user interface components is a button.

12. (Currently Amended) The computer implemented system of claim 9 wherein at least one of said plurality of user interface components is a slider.

5 13. (Currently Amended) The computer implemented system of claim 9 wherein at least one of said plurality of user interface components is an edit box.

14. (Currently Amended) The computer implemented system of claim 9 wherein at least one of said plurality of user interface components is implemented as an
10 ActiveX control.

15. (Currently Amended) The computer implemented system of claim 9 wherein at least one of said plurality of user interface components is implemented as a Java applet.

15 16. (Currently Amended) The computer implemented system of claim 9 wherein at least one of said plurality of user interface components is implemented using Javascript.

20 17. (Currently Amended) The computer implemented system of claim 9 wherein said document viewer is implemented as a COM object.

18. (Currently Amended) The computer implemented system of claim 9 wherein said document viewer is implemented as a DCOM object.

19. (Currently Amended) The computer implemented system of claim 9 wherein said document viewer is implemented as a CORBA object.

20. (Currently Amended) The computer implemented system of claim 9
5 wherein said renderer is a DHTML browser.

21. (Previously Presented) A method for providing a graphical user interface for a component based application program, comprising:

providing a user interface requirements specification for a document viewer, the
10 document viewer being used to display a document or to modify the document within a component based application program, and the user interface requirements specification referencing at least one of a plurality of user interface components; and

rendering a graphical user interface for the component based application program according to the document viewer user interface requirements specification, when the
15 document viewer is added as a component of the component based application program, without recompiling or reinstalling the component based application program.

22. (Previously Presented) The method of claim 21 further comprising registering user interface components associated with the user interface requirements
20 specification, with a workflow manager.

23. (Previously Presented) The method of claim 22 further comprising:
adding a new user interface requirements specification to the component based application program; and

registering user interface components associated with the new user interface requirements specification, with the workflow manager.

24. (Previously Presented) The method of claim 22 further comprising:
5 providing a modified user interface requirements specification; and
registering user interface components associated with the modified user interface requirements specification, with the workflow manager.

25. (Previously Presented) The method of claim 21 wherein at least one
10 of the plurality of user interface components is a button.

26. (Previously Presented) The method of claim 21 wherein at least one of the plurality of user interface components is a slider.

15 27. (Currently Amended) The method of claim 21 wherein at least one of the plurality of user interface components is an edit box.

28. (Previously Presented) The method of claim 21 wherein at least one of the plurality of user interface components is implemented as an ActiveX control.

20 29. (Previously Presented) The method of claim 21 wherein at least one of the plurality of user interface components is implemented as a Java applet.

30. (Previously Presented) The method of claim 21 wherein at least one
25 of the plurality of user interface components is implemented using Javascript.

31. (Previously Presented) The method of claim 21 wherein the document viewer is implemented as a COM object.

5 32. (Previously Presented) The method of claim 21 wherein the document viewer is implemented as a DCOM object.

33. (Previously Presented) The method of claim 21 wherein the document viewer is implemented as a CORBA object.

10 34. (Previously Presented) The method of claim 21 wherein said rendering is performed by a DHTML browser.

35. (Currently Amended) A computer implemented system for providing a graphical user interface for a component based application program, comprising:

at least one user interface component;

a document viewer for displaying a document or modifying the document within a component based application program, the document viewer having a user interface requirements specification referencing at least one of said at least one user interface component, the document viewer having at least one predefined user interface layout defining an arrangement of said at least one user interface component;

20 a renderer to render a graphical user interface according to said at least one predefined user interface layout and a present context for said component based application program; and

an application proxy to manage communication between said renderer, said document viewer, and said at least one user interface component such that said graphical user interface is rendered upon a change in said present context.

5 36. (Currently Amended) The computer implemented system claimed in claim 35 wherein said renderer comprises a DHTML browser.

37. (Currently Amended) The computer implemented system claimed in claim 36 wherein said predefined user interface layout is a browser page defined in DHTML.

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38. (Currently Amended) The computer implemented system according to claim 37 wherein said DHTML includes at least one object to communicate with said application proxy.

15 39. (Currently Amended) The computer implemented system according to claim 38 wherein said at least one object is a Javascript object.

40. (Currently Amended) The computer implemented system according to claim 36 wherein said at least one user interface component is an ActiveX control.

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41. (Currently Amended) The computer implemented system according to claim 36 wherein said at least one user interface component is a Java applet.

42. (Previously Presented) A method for creating a graphical user interface for an application program implemented with a component architecture, comprising:

providing at least one document viewer for displaying a document or modifying the document within a component based application program, the document viewer having a user interface requirements specification referencing at least one user interface component, said at least one user interface component to be displayed in said graphical user interface in at least one context for said application program;

defining a graphical user interface layout for at least said at least one application program component, said graphical user interface layout defining a position and an arrangement for said at least one user interface component in said at least one context;

instantiating said at least one user interface component and associating it with said at least one application program component;

determining a present context of said application program and rendering said graphical user interface in accordance with said graphical user interface layout defined for said present context; and

rerendering said graphical user interface each time said present context of said application program changes.